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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/589,449	06/07/2000	Arda Akman	12096RNUS01U	9103

27820 7590 12/18/2003

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EXAMINER

PARTON, KEVIN S

ART UNIT	PAPER NUMBER
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2153

DATE MAILED: 12/18/2003

15

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/589,449

Applicant(s)

AKMAN, ARDA

Examiner

Kevin Parton

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 September 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other: _____

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed 09/26/2003 have been fully considered but they are not persuasive. Please see the following reasons and the associated grounds of rejection below.
2. The applicant argues "the references of record ... do not teach or suggest that a firewall or a server positioned behind the firewall does the translating" (page 7, paragraph 1). The argument is not persuasive because this limitation has been addressed in the previous rejections and the basis of rejection is restated below. In addition, this argument has been addressed in a previous Office Action.
3. The applicant further argues "Applicant has amended independent claims...to reflect the position where the translation occurs...within the first IP network" (page 7, paragraph 1). Please see this new limitation addressed in the associated grounds of rejection below. The newly amended independent claims do not point out the presence of a firewall in the system.
4. The applicant further argues "Arrow's translation device 808 is clearly positioned outside the first IP network" (page 7, paragraph 2). This argument is moot in view of the new grounds of rejection below.
5. In response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the

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applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 1-4 and 7-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Zhang et al. (USPN 6,381,646) in view of Cave et al. (USPN 6,404,746).

8. Regarding claim 1, Zhang et al. (USPN 6,381,646) teach a system for translating IP addresses within messages, the messages originating and terminating in different IP networks, comprising means for:

- a. Receiving a message from a node on a first IP network (column 6, line 42).
- b. Translating an IP address within the message from the IP address associated with the first IP network to an IP address associated with a second IP network, the means for translating an IP address within the message being positioned in a device within the first IP network (figure 7; column 6, line 65 – column 7, line 7; column 4, lines 58-62).
- c. Routing the message to a node on said second IP network (column 7, lines 3-4).

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Although the system disclosed by Zhang et al. (USPN 6,381,646) shows substantial features of the claimed invention, it fails to disclose means wherein the message is a control protocol message.

Nonetheless, these features are well known in the art and would have been an obvious modification of the system disclosed by Zhang et al. (USPN 6,381,646), as evidenced by Cave et al. (USPN 6,404,746).

In an analogous art, Cave et al. (USPN 6,404,746) disclose a system for transmission of messages on a network wherein the messages are control protocol messages (column 21, lines 42-51). Note that in the reference, the standards discussed are control standards and would send control protocol messages.

Given the teaching of Cave et al. (USPN 6,404,746), a person having ordinary skill in the art would have readily recognized the desirability and advantages of modifying Zhang et al. (USPN 6,381,646) by employing the use of control protocol messages. Control protocols are used in all networks and specifically can benefit the system by allowing for Internet telephony.

9. Regarding claim 2, Zhang et al. (USPN 6,381,646) teach all the limitations as applied to claim 1. They further teach means wherein the translation is network address translation (NAT) (column 6, line 65 – column 7, line 3). Note that in the reference, NAT is one of the possible schemas for address translation.

10. Regarding claim 3, although the system disclosed by Zhang et al. (USPN 6,381,646) (as applied to claim 1) shows substantial features of the claimed invention, it fails to disclose means wherein the node on the first IP network is a media gateway and the node on the second IP network is a media gateway controller.

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Nonetheless, these features are well known in the art and would have been an obvious modification of the system disclosed by Zhang et al. (USPN 6,381,646), as evidenced by Cave et al. (USPN 6,404,746).

In an analogous art, Cave discloses a system with multiple communicating networks wherein the node on a first IP network is a media gateway and the node on a second IP network is a media gateway controller (figure 2). Note that in the reference, gateways and a gatekeeper are used. These can communicate as media gateways and media gateway controllers.

Given the teaching of Cave et al. (USPN 6,404,746), a person having ordinary skill in the art would have readily recognized the desirability and advantages of modifying Zhang et al. (USPN 6,381,646) by employing the communication of media gateways and media gateway controllers. These are common network nodes that may be available on any two communicating networks. They benefit the system by providing service for multimedia communication including Internet telephony.

11. Regarding claim 4, although the system disclosed by Zhang et al. (USPN 6,381,646) (as applied to claim 1) shows substantial features of the claimed invention, it fails to disclose means wherein the control protocol is MEGACO.

Nonetheless, these features are well known in the art and would have been an obvious modification of the system disclosed by Zhang et al. (USPN 6,381,646), as evidenced by Cave et al. (USPN 6,404,746).

In an analogous art, Cave et al. (USPN 6,404,746) disclose a system for multiple network communication wherein the control protocol is MEGACO (column 21, lines 42-51). Note that in the reference, MEGACO is one of the possible standards that can be used.

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Given the teaching of Cave et al. (USPN 6,404,746), a person having ordinary skill in the art would have readily recognized the desirability and advantages of modifying Zhang et al. (USPN 6,381,646) by employing the use of MEGACO. MEGACO is an industry standard and can benefit the system by allowing for Internet telephony. In addition, MEGACO uses the same implementation for different network types (i.e. ATM or IP) and thus allows for easier portability.

12. Regarding claims 7 and 9, Zhang et al. (USPN 6,381,646) teach a system for translating IP addresses within messages, the messages originating and terminating in different IP networks, comprising means for:

- a. Receiving a message from a node on a second IP network, the message including an IP address associated with the second IP network. (column 6, line 42).
- b. Translating the IP addresses associated with the second network included within the message to an IP address associated with the first IP network, wherein the translating occurs at a device within the first IP network (figure 9; column 6, line 65 – column 7, line 7; column 4, lines 58-62).
- c. Routing the message to a node on the first IP network (figure 9; column 7, lines 3-4).

Although the system disclosed by Zhang et al. (USPN 6,381,646) shows substantial features of the claimed invention, it fails to disclose means wherein the message is a control protocol message.

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Nonetheless, these features are well known in the art and would have been an obvious modification of the system disclosed by Zhang et al. (USPN 6,381,646), as evidenced by Cave et al. (USPN 6,404,746).

In an analogous art, Cave et al. (USPN 6,404,746) disclose a system for transmission of messages on a network wherein the messages are control protocol messages (column 21, lines 42-51). Note that in the reference, the standards discussed are control standards and would send control protocol messages.

Given the teaching of Cave et al. (USPN 6,404,746), a person having ordinary skill in the art would have readily recognized the desirability and advantages of modifying Zhang et al. (USPN 6,381,646) by employing the use of control protocol messages. Control protocols are used in all networks and specifically can benefit the system by allowing for Internet telephony.

13. Regarding claims 8 and 10, although the system disclosed by Zhang et al. (USPN 6,381,646) (as applied to claim 7) shows substantial features of the claimed invention, it fails to disclose means wherein the control protocol is MEGACO.

Nonetheless, these features are well known in the art and would have been an obvious modification of the system disclosed by Zhang et al. (USPN 6,381,646), as evidenced by Cave et al. (USPN 6,404,746).

In an analogous art, Cave et al. (USPN 6,404,746) disclose a system for multiple network communication wherein the control protocol is MEGACO (column 21, lines 42-51). Note that in the reference, MEGACO is one of the possible standards that can be used.

Given the teaching of Cave et al. (USPN 6,404,746), a person having ordinary skill in the art would have readily recognized the desirability and advantages of modifying Zhang et al.

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(USPN 6,381,646) by employing the use of MEGACO. MEGACO is an industry standard and can benefit the system by allowing for Internet telephony. In addition, MEGACO uses the same implementation for different network types (i.e. ATM or IP) and thus allows for easier portability.

14. Claims 5, 6, and 11-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Zhang et al. (USPN 6,381,646) in view of Cave et al. (USPN 6,404,746) and Morris et al. (USPN 6,496,851).

15. Regarding claim 5, Zhang et al. (USPN 6,381,646) teach a system for translating IP addresses within messages exchanged between a node on a first IP network and a node on a second IP network comprising:

- a. A port having an IP address associated with said first IP network, said port for receiving a message from the first node intended for the second node, said message including an IP address associated with said second IP network (figure 3). Note that a port is inherent to any device receiving and sending network traffic.
- b. A Network Address Translator for translating the IP address associated with said first IP network included within the message to an IP address associated with said second IP network (figure 7; column 6, line 65 – column 7, line 7). Note that in the reference, translation is not always necessary, but depending on the resource sought, the translation may be required.

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- c. A routing component for routing the message to the media gateway controller (column 7, lines 3-4). Note that in the reference, when translation is performed, the message is sent on to the translated address.

Although the system disclosed by Zhang et al. (USPN 6,381,646) shows substantial features of the claimed invention, it fails to disclose means wherein:

- a. The messages are control protocol messages.
- b. The first node is a media gateway and the second node is a media gateway controller.
- c. The translation takes place via a firewall.

Nonetheless, these features are well known in the art and would have been an obvious modification of the system disclosed by Zhang et al. (USPN 6,381,646), as evidenced by Cave et al. (USPN 6,404,746) and Morris et al. (USPN 6,496,851).

In an analogous art, Cave et al. (USPN 6,404,746) discloses a system for internetwork communication wherein:

- a. The messages are control protocol messages (column 21, lines 42-51).
- b. The first node is a media gateway and the second node is a media gateway controller (figure 2).

Given the teaching of Cave et al. (USPN 6,404,746), a person having ordinary skill in the art would have readily recognized the desirability and advantages of modifying Zhang et al. (USPN 6,381,646) by employing the use of control protocol messages and media gateway and media gateway controller nodes. This benefits the system by including well-known nodes and message types that are specially suited for media data types.

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In an analogous art, Morris et al. (USPN 6,496,851) disclose a system for internetwork communication wherein translation is implemented via a firewall (column 10, lines 48-54).

Given the teaching of Morris et al. (USPN 6,496,851), a person having ordinary skill in the art would have readily recognized the desirability and advantages of modifying Zhang et al. (USPN 6,381,646) by employing the translation of addresses within or behind the firewall. This benefits the system by protecting the address translation server, which would necessarily contain information on the structure of the IP network that may be sensitive.

16. Regarding claim 6, although the system disclosed by Zhang et al. (USPN 6,381,646) (as applied to claim 5) shows substantial features of the claimed invention, it fails to disclose means wherein the control protocol is MEGACO.

Nonetheless, these features are well known in the art and would have been an obvious modification of the system disclosed by Zhang et al. (USPN 6,381,646), as evidenced by Cave et al. (USPN 6,404,746).

In an analogous art, Cave et al. (USPN 6,404,746) disclose a system for multiple network communication wherein the control protocol is MEGACO (column 21, lines 42-51). Note that in the reference, MEGACO is one of the possible standards that can be used.

Given the teaching of Cave et al. (USPN 6,404,746), a person having ordinary skill in the art would have readily recognized the desirability and advantages of modifying Zhang et al. (USPN 6,381,646) by employing the use of MEGACO. MEGACO is an industry standard and can benefit the system by allowing for Internet telephony. In addition, MEGACO uses the same implementation for different network types (i.e. ATM or IP) and thus allows for easier portability.

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17. Regarding claims 11, 13, and 15, Zhang et al. (USPN 6,381,646) teach a system for translating IP addresses within messages sent between two IP networks with means for:

- a. Receiving messages on a first IP network (figure 3).
- b. Offloading messages to a server (column 4, lines 58-62; column 5, lines 52-54).
- c. Routing messages to a node on a second IP network (column 7, lines 3-4).
- d. Translating IP addresses within a message from IP addresses associated with the first network to IP addresses associated with the second network (figure 7; column 6, line 65 – column 7, line 7).
- e. The server positioned within the first IP network (column 4, lines 58-62)

Although the system disclosed by Zhang et al. (USPN 6,381,646) shows substantial features of the claimed invention, it fails to disclose means wherein:

- a. The messages are control protocol messages.
- b. The system includes a firewall for receiving messages.
- c. The address translation server is behind the firewall.

Nonetheless, these features are well known in the art and would have been an obvious modification of the system disclosed by Zhang et al. (USPN 6,381,646), as evidenced by Cave et al. (USPN 6,404,746) and Morris et al. (USPN 6,496,851).

In an analogous art, Cave et al. (USPN 6,404,746) discloses a system for internetwork communication wherein:

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- a. The messages are control protocol messages (column 21, lines 42-51). Note that in the reference, the standards discussed are control standards and would send control protocol messages.

Given the teaching of Cave et al. (USPN 6,404,746), a person having ordinary skill in the art would have readily recognized the desirability and advantages of modifying Zhang et al. (USPN 6,381,646) by employing the use of control protocol messages. This benefits the system by including well-known nodes and message types that are specially suited for media data types.

In an analogous art, Morris et al. (USPN 6,496,851) disclose a system for internetwork communication wherein:

- a. The system includes a firewall for receiving messages (column 10, lines 48-54).
- b. Translation occurs behind a firewall (column 10, lines 48-54)

Given the teaching of Morris et al. (USPN 6,496,851), a person having ordinary skill in the art would have readily recognized the desirability and advantages of modifying Zhang et al. (USPN 6,381,646) by employing the translation of addresses via the firewall. This benefits the system by protecting the address translation server, which would necessarily contain information on the structure of the IP network that may be sensitive. Please note that the address translation of Morris et al. (USPN 6,496,851) is protected by a firewall and can thus be considered "behind" the firewall.

18. Regarding claims 12, 14, and 16, although the system disclosed by Zhang et al. (USPN 6,381,646) (as applied to claim 11) shows substantial features of the claimed invention, it fails to disclose means wherein the control protocol is MEGACO.

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Nonetheless, these features are well known in the art and would have been an obvious modification of the system disclosed by Zhang et al. (USPN 6,381,646), as evidenced by Cave et al. (USPN 6,404,746).

In an analogous art, Cave et al. (USPN 6,404,746) disclose a system for multiple network communication wherein the control protocol is MEGACO (column 21, lines 42-51). Note that in the reference, MEGACO is one of the possible standards that can be used.

Given the teaching of Cave et al. (USPN 6,404,746), a person having ordinary skill in the art would have readily recognized the desirability and advantages of modifying Zhang et al. (USPN 6,381,646) by employing the use of MEGACO. MEGACO is an industry standard and can benefit the system by allowing for Internet telephony. In addition, MEGACO uses the same implementation for different network types (i.e. ATM or IP) and thus allows for easier portability.

19. Regarding claim 17, Zhang et al. (USPN 6,381,646) teach all the limitations as applied to claim 5. They further teach means wherein the port is adapted to listen for a Service Change message to determine that a new media gateway is becoming available (figure 9). Please note that in the reference, the port listens for packets. A packet could be any type of message and if from a new host, would show that a new media gateway is available.

20. Regarding claim 18, Zhang et al. (USPN 6,381,646) teaches all the limitations as applied to claim 17. They further teach means wherein the network address translator is adapted to place an IP address of the new media gateway in a NAT table of IP addresses (figure 5; figure 10). Note that NAT addresses are stored in a table in the reference.

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21. Claims 19-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Zhang et al. (USPN 6,381,646) and Cave et al. (USPN 6,404,746) as applied to claims 1, 7, and 9 above, and further in view of Morris et al. (USPN 6,496,851).

22. Regarding claims 19, 20, and 21, although the system disclosed by Zhang et al. (USPN 6,381,646) (as applied to claims 1, 7, and 9) shows substantial features of the claimed invention, it fails to disclose means wherein address translation takes place via one of: a firewall for the first IP network, a router for the first IP network, and a server positioned within the first IP network behind a firewall.

Nonetheless, these features are well known in the art and it would have been an obvious modification of the system disclosed by Zhang et al. (USPN 6,381,646), as evidenced by Morris et al. (USPN 6,496,851).

In an analogous art, Morris et al. (USPN 6,496,851) disclose a system for internetwork communication wherein address translation takes place via one of: a firewall for the first IP network, a router for the first IP network, and a server positioned within the first IP network behind a firewall (column 10, lines 48-54).

Given the teaching of Morris et al. (USPN 6,496,851), a person having ordinary skill in the art would have readily recognized the desirability and advantages of modifying Zhang et al. (USPN 6,381,646) by employing address translation at or “behind” a firewall. This benefits the system by protecting the address translation server, which would necessarily contain information on the structure of the IP network that may be sensitive. Please note that the address translation of Morris et al. (USPN 6,496,851) is protected by a firewall and can thus be considered “behind” the firewall.

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Conclusion


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kevin Parton whose telephone number is (703)306-0543. The examiner can normally be reached on M-F 8:00AM - 4:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenton Burgess can be reached on (703)305-4792. The fax phone number for the organization where this application or proceeding is assigned is (703)872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)305-3900.

Kevin Parton
Examiner
Art Unit 2153

ksp


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